

IT IS CLAIMED:

1. A memory card system, comprising:
an enclosed electronic circuit card having first and second sets of electrical contacts with different contact patterns positioned apart from each other such that they mate with a respective one of first and second mating receptacles but not the other, at least the first set of contacts being carried by an outside surface of the card,
a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card with different signal protocols through either of the first or second sets of contacts without use of the other, and
a cover carried by the card and moveable by hand between at least first and second positions with respect to the card, the first set of contacts being covered when the cover is in the first position and exposed for insertion into the first mating receptacle when the cover is in the second position.
2. The memory card system of claim 1, wherein the first set of contacts has a contact pattern and signal protocol therethrough that follows a USB standard.
3. The memory card system of claim 2, wherein the second set of contacts has a contact pattern and signal protocol therethrough that follows a memory card standard.
4. The memory card system of claim 3, wherein the memory card standard is a SD card standard.
5. The memory card system of claim 2, wherein the second set of contacts is also carried by an outside surface of the card.
6. The memory card system of claim 5, wherein the cover is slideable between its first and second positions.

7. The memory card system of claim 6, wherein the second set of contacts is covered when the cover is in the second position.

8. The memory card system of claim 6, wherein the second set of contacts is not covered when the cover is in the second position.

9. The memory card system of claim 1, wherein the cover is connected with the card by a hinge about which the cover is rotated between its first and second positions.

10. The memory card system of claim 9, wherein the second set of contacts are not covered when the cover is in the second position.

11. The memory card system of claim 1, wherein the cover includes two parts that are each connected with the card by a hinge about which the cover part is rotated between the first and second positions of the cover, the hinges being spaced apart across the card.

12. The memory card system of claim 11, wherein the second set of contacts are not covered when the cover is in the second position.

13. A memory card system, comprising:
an enclosed electronic circuit card having first and second sets of electrical contacts positioned on outside surface areas thereof with different contact patterns, the first and second sets of electrical contacts being spaced apart a distance in one direction along the card,

a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card through either of the first or second sets of contacts without use of the other, and

a sleeve surrounding the card in a manner to be slid by hand in said one direction relative to the card between a first position exposing the first set of contacts while covering the second set of contacts and a second position exposing the second set of contacts while covering the first set of contacts.

14. The memory system of claim 13, wherein the sleeve and the card have relative dimensions so that the card fits within a footprint of the sleeve when the sleeve is in the first position.

15. The memory system of claim 14, wherein the sleeve includes one or more apertures positioned to expose the first set of contacts therethrough when the sleeve is in the first position.

16. The memory system of claim 14, wherein the sleeve has an open portion of an end through which the card extends to expose the second set of contacts outside the footprint of the sleeve when the sleeve is in the second position.

17. The memory system of claim 15, wherein the sleeve has an open portion of an end through which the card extends to expose the second set of contacts outside the footprint of the sleeve when the sleeve is in the second position.

18. The memory system of claim 17, wherein the pattern of the first set of contacts is arranged in accordance with a published memory card standard and the second set of contacts is arranged in accordance with a published USB connector standard.

19. The memory system of claim 18, wherein the pattern of the first set of contacts is arranged in accordance with the SD card standard and the footprint of the sleeve has dimensions in accordance with the SD card standard.

20. The memory system of claim 13, wherein the pattern of the first set of contacts is arranged in accordance with a published memory card standard and the second set of contacts is arranged in accordance with a published USB connector standard.

21. The memory system of claim 20, wherein the pattern of the first set of contacts is arranged in accordance with the SD card standard.

22. The memory system of claim 17, wherein the sleeve contains wall segments adjacent the open portion of the end that defines the second position of the sleeve relative to the circuit card.

23. The memory system of claim 22, wherein the first and second sets of contacts are positioned on a common side of the circuit card, and wherein the sleeve includes an open region adjacent the end containing the open portion that exposes a portion of an opposite side of the circuit card.

24. The memory system of claim 17, wherein an end of the sleeve opposite to the end containing the open portion includes a stop that defines the first position of the sleeve relative to the circuit card.

25. A memory card system, comprising:
an enclosed electronic circuit card having first and second spaced apart sets of external surface electrical contacts having different arrangements of contacts,
a re-programmable non-volatile memory system within the card and operably connected to transfer data between the memory and outside of the card through either of the first or second sets of contacts,
a sleeve surrounding the card in a manner allowing the card to be slid by hand between at least a first position wherein substantially all of the card is positioned within the sleeve and a second position wherein the card is partially removed through an end opening of the sleeve to expose a surface portion thereof containing the first set of contacts,
one or more openings through the sleeve in positions that expose the second set of contacts therethrough when the card is in the first position, and
wherein the first set of contacts is covered by the sleeve when the card is in the first position and the second set of contacts are covered by the sleeve when the card is in the second position.

26. The system of claim 25, wherein the first and second sets of contacts follow respective first and second different published standards.

27. The system of claim 26, wherein the first published standard is that of the Universal Serial Bus (USB).

28. The system of claim 27, wherein the second published standard is that of the Secure Digital (SD) memory card.

29. The system of claim 25, wherein the second set of contacts is arranged along an edge of the card and the one or more openings include a plurality of openings that expose the second set of contacts.

30. The system of claim 25, wherein the surface portion of the card containing the first set of contacts is a rectangle having a width less than that of other portions of the card.

31. The system of claim 25, wherein the sleeve and the card in the first position together have a size and shape substantially according to the published standard of the Secure Digital (SD) memory card.

32. The system of claim 25, wherein a thickness of the card in the surface portion containing the first set of contacts is greater than a thickness of the card in a portion containing the second set of contacts.

33. The system of claim 25, wherein the first and second sets of contacts are positioned on one side of the card on a common planar surface.

34. The system of claim 25, wherein the first and second sets of contacts are positioned on one side of the card, and the sleeve has an opening adjacent its said end opening on a side opposite to the one or more openings that expose the second set of contacts in order to expose a portion of an opposite side of the card.

35. The system of claim 25, wherein the sleeve further includes a resilient sidewall portion with a lip positioned at the end opening of the sleeve that engages an end of the card when the card is in the first position within the sleeve and holds the card in the first position.

36. An enclosed memory card, comprising:
a first portion having a shape, a first thickness and a first set of contacts positioned on an outside surface thereof, all according to a published card standard,
a second portion rigidly connected to the first portion and having a rectangular shape, a second set of contacts positioned on an outside surface thereof and a second thickness in at least a region carrying the second set of contacts, all according to a USB plug standard,
wherein the second thickness is greater than the first thickness, and the first and second sets of contacts are positioned on a common side of the card,
re-programmable non-volatile memory within the card, and
electronic circuits within the card that are connected to the non-volatile memory to control its operation, connected to the first set of contacts to operate with a signal protocol according to the published card standard and connected to the second set of contacts to operate with a signal protocol according to the USB standard.

37. The memory card according to claim 36, wherein the outside surfaces of the first and second portions are parts of a planar surface on the common side of the card.

38. The memory card according to claim 36, wherein the published card standard is that of a SD card.

39. A memory card system, comprising:
a rectangularly shaped sleeve having a first set of contacts along a first edge thereof with a pattern according to a published memory card standard and an opening along a second edge thereof opposite to the first edge,

an enclosed circuit card shaped for a first end to be inserted into the sleeve through the opening thereof to abut a physical stop within the sleeve, wherein a portion of the card extends out of the opening of the sleeve with a shape and a second set of contacts according to a USB plug standard,

mating contacts within the sleeve and on the card that connect the card with the first set of contacts when the card is inserted into the sleeve with the first end of the card abutting the physical stop within the sleeve,

a re-programmable non-volatile memory within the card, and

electronic circuits within the card that are connected to the non-volatile memory to control its operation, connected to the mating contacts of the card to operate with a signal protocol according to the published card standard and connected to the second set of contacts to operate with a signal protocol according to the USB standard.

40. The memory card according to claim 39, wherein the published card standard is that of a SD card.

41. A method of transferring data between a first host having a first receptacle for receiving and connecting with a first set of circuit card contacts according to a first circuit card published standard and a second host having a second receptacle for receiving and connecting with a second set of circuit contacts according to a second circuit card published standard, wherein the first and second sets of contacts are physically incompatible with each other and the formats of at least some of the signals communicated therethrough are also incompatible with each other, comprising:

providing a memory circuit card containing re-programmable non-volatile memory that is accessible for transfer of data therewith through either of the first and second sets of circuit card contacts externally positioned thereon at spaced apart locations, wherein a cover exists over the first set of memory circuit card contacts,

removing the cover from the first set of memory circuit card contacts,

thereafter inserting the first set of memory circuit card contacts into the first receptacle of the first host,

thereafter transferring data from the first host into the memory of the memory circuit card through the first set of memory circuit card contacts,

thereafter removing the first set of memory circuit card contacts from the first host,

thereafter replacing the cover over the first set of memory circuit card contacts,

thereafter inserting the second set of memory circuit card contacts into the second receptacle of the second host, and

thereafter transferring the data from the memory of the memory circuit card into the second host through the second set of memory circuit card contacts.